




UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/691,380	10/22/2003	Masaaki Tabata	FP03-051US	8661
1218	7590	05/28/2004	EXAMINER TA, THO DAC	
CASELLA & HESPOS 274 MADISON AVENUE NEW YORK, NY 10016			ART UNIT 2833	PAPER NUMBER

DATE MAILED: 05/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/691,380	TABATA ET AL.	
	Examiner	Art Unit	
	Tho D. Ta	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13 and 14 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/22/03</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Page 1 & 2 of US 4,343,523</u> |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-11, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Cairus et al. (4,343,523).

In regard to claim 1, Cairus et al. discloses a connector with a housing (50) having at least one cavity (55), a resiliently deformable lock (56) provided at a first surface of the cavity (55) and being resiliently deformable into a deformation permitting space (58), at least one terminal fitting (10) with a tube insertable into the cavity (55) along an insertion direction, the terminal fitting (10) being configured to deflect the lock (56) into the deformation permitting space (58) during insertion and to be engaged by the lock (56) after complete insertion of the terminal fitting (10) in the cavity (55), and a retainer (60) mountable to the housing (50) and insertable into a deformation permitting space (58) for preventing resilient deformation of the lock (56), wherein: an area of the cavity (55) for accommodating the tube has a cross section substantially conforming with the tube, a first guiding surface (see fig. 1) at least at one corner of a second

Art Unit: 2833

surface of the cavity (55) substantially opposite to the first surface of the cavity (12) for narrowing the cavity (55) in directions transverse to the insertion direction, the tube of the terminal fitting (10) being pressable against the first guiding surface by displacing the lock (56) towards the terminal fitting (10) when the retainer (60) is mounted, thereby preventing the terminal fitting (10) from shaking in lateral and/or vertical directions.

In regard to claim 2, Cairus et al. discloses that a guiding section (the surface where retainer 60 engages as shown in Figures 2 and 3) is formed on the lock (56) for forcibly displacing the lock (56) towards the terminal fitting (10) upon the insertion of the retainer (60).

In regard to claim 3, Cairus et al. discloses that the second surface faces a locking section (57) of the lock (56) that engages the terminal fitting (10).

In regard to claim 4, Cairus et al. discloses that the retainer (60) is mountable to a front surface of the housing (50).

In regard to claim 5, Cairus et al. discloses that the second surface of the cavity (55) has a recess (53) for receiving the tube.

Art Unit: 2833

In regard to claim 6, Cairus et al. discloses that a second guiding surface (see attached drawing) for shortening the cavity (12) in directions parallel to the insertion direction at locations adjacent the second surface of the cavity (55).

In regard to claim 7, Cairus et al. discloses that the tube is pressable against the second guiding surface by displacing the lock (56) towards the terminal fitting (10) when the retainer (60) is mounted, thereby preventing the terminal fitting (10) from shaking parallel to the insertion direction.

In regard to claim 8, Cairus et al. discloses that the first guiding surface (see fig. 1) and the second guiding surface (see attached drawing) are provided on facing corners of the second surface.

In regard to claim 9, Cairus et al. discloses a connector with a housing (50) having opposite front and rear ends and at least one cavity (55) extending in a longitudinal direction between the front and rear ends, the cavity (55) having opposed first and second surfaces extending substantially parallel to the longitudinal direction, a resiliently deformable lock (56) provided on the first surface of the cavity (55), the second surface having at least one chamfered longitudinal corner (see fig. 1) extending along the longitudinal direction of the cavity (155) for narrowing the cavity (55) at locations adjacent the second surface and in a width direction transverse to the longitudinal direction.

In regard to claim 10, Cairus et al. discloses that the at least one chamfered longitudinal corner comprises two opposed chamfered longitudinal corners (see fig. 1).

In regard to claim 11, Cairus et al. discloses that the second surface further has at least one chamfered transverse corner (see attached drawing) extending along the width direction of the cavity for shortening the cavity at locations adjacent the second surface and in the longitudinal direction.

In regard to claim 13, Cairus et al. discloses that a deformation permitting space (58) adjacent the resiliently deformable lock (56) for accommodating deformation of the lock (56) away from the second surface and a retainer (60) insertable into the deformation permitting space (58) for urging the lock (56) towards the second surface.

In regard to claim 14, Cairus et al. discloses that a terminal fitting (10) insertable into the cavity (55) and configured to be locked by the lock (56), the terminal fitting (10) having a rectangular tube dimensioned to be urged into the chamfered longitudinal corners when the retainer (60) is inserted into the deformation permitting space (58) for preventing shaking of the terminal fitting (10) in the cavity (55).

Allowable Subject Matter

4. Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: the prior art fails to provide, teach or suggest the at least one chamfered transverse corner comprises two opposed chamfered transverse corners; and in combination with all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho D. Ta whose telephone number is (571) 272-2014. The examiner can normally be reached on M-F (8:00-5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (571) 272-2800 ext 33. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2833

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



THOD.TA
PRIMARY EXAMINER

tdt
05/24/04

FIG. 1

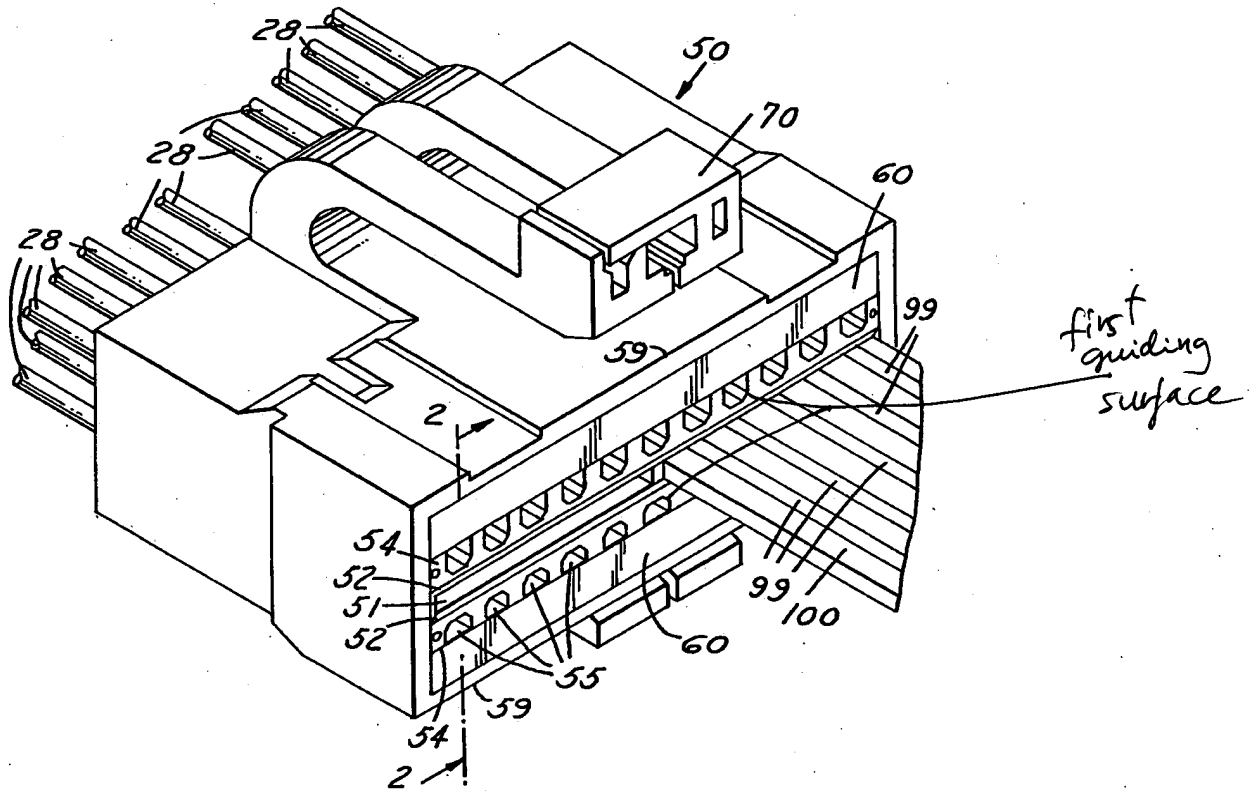
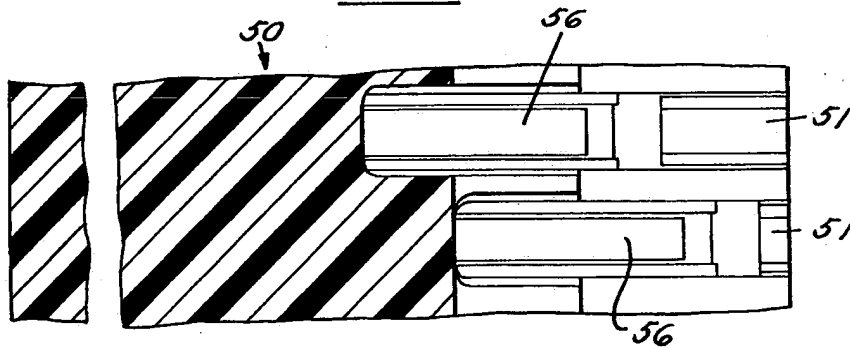
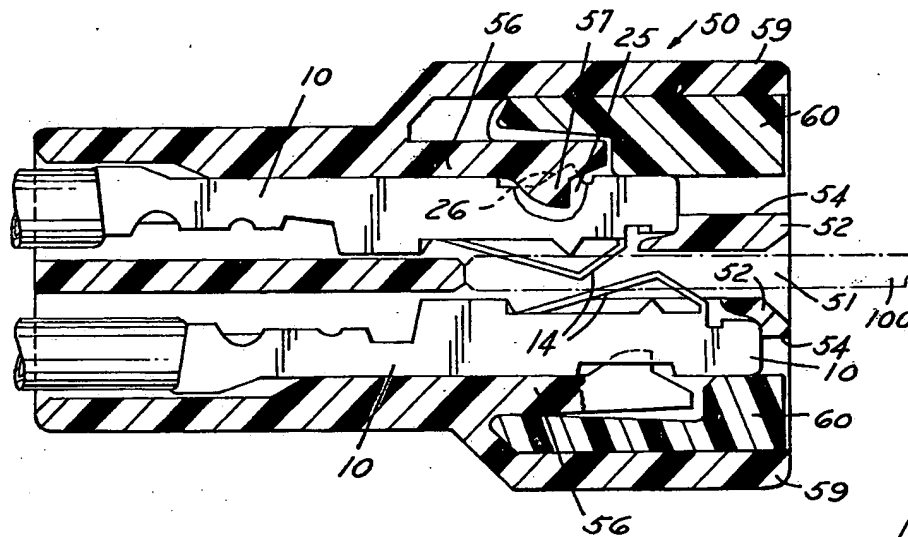
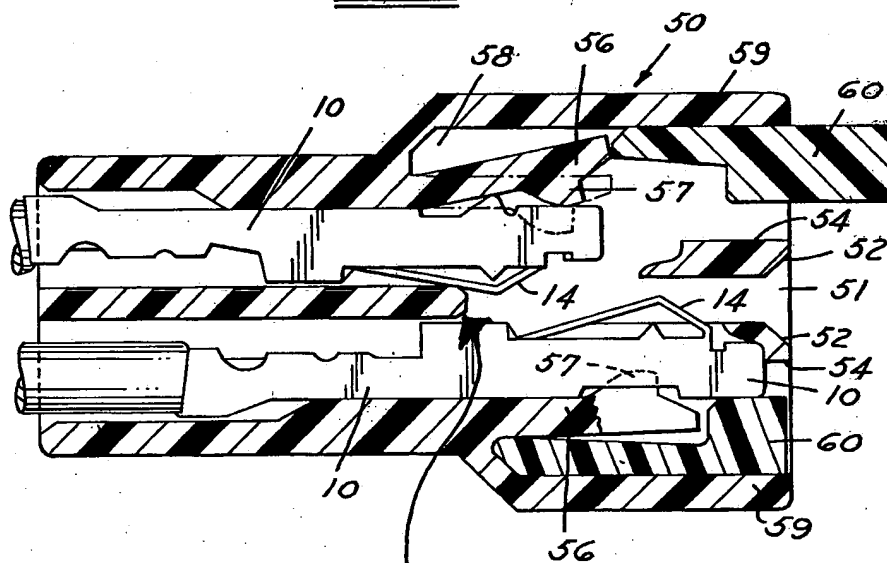


FIG. 8



10/691,380

FIG. 2FIG. 3

Chamfered transverse corner
or
second guiding surface

10/69,380